clude, as maintained by Todd and Bowman, that "the spinal cord shares, in some degree, in the functions of sensation and voluntary motion." These writers remark that "the recent discovery of the *amphioxus lanceolatus*, a small fish found in the Archipelago, makes it highly probable that voluntary motion and sensation may exist where there is a well-developed spinal cord, the anterior extremity of which tapers to a fine point, and is far from exhibiting the ordinary characteristics even of a brain so inferior in organization as that of fishes."[1]

Here there was a partial restoration of sensation and motion, with such a physical condition of the cord as would seem entirely inconsistent with the existence of such functions, viz: ramollissement, atrophy, and degeneration; and, according to Dr. Graves, an entire twisting off, or disappearance of the nervous matter of the cord, between the fifth and sixth vertebræ.

ART. VIII.—*Operation for Laceration of the Perineum.* By F. M. ROBERTSON, M. D., Lecturer on Obstetrics in the Charleston Summer Medical Institute. [With a wood-cut.]

IT is not my design to enter into a discussion of the manner in which this accident may occur, or to compare the merits of the various operative procedures proposed and advocated by different surgeons and obstetricians for the purpose of relief. In alluding to the slight reference to the accident by various writers on obstetrics, Fahnestock remarks:—

"This silence on so important a subject can only be ascribed to the general impression, that the accident is one of very rare occurrence. It may be, in the practice of judicious practitioners, for Dr. Dewees informed the writer, a few years since, that he had to contend with but one case, happening to himself, in his extensive practice, which he attributed to the patient attention he always bestowed on supporting the perineum during the expulsion of the child through the os externum; yet, such is the nature of things that, in some cases, with the best management, laceration of the perineum is unavoidable."—*Am. Journ. Med. Sciences*, N. S. vol. i. p. 99.

The author just quoted states that only one case of laceration occurred, under his management, in a practice of eighteen years. In a practice extending over a period—from 1829 to 1854—of twenty-five years, the accident has never occurred in any case, of either natural or instrumental labour, under the management of the writer.

During the past summer I was consulted in relation to a lady, aged about twenty-four years, who, I was informed, had suffered from this melancholy accident, while in labour with her first child, about a year since. She was attended by a midwife, and the occurrence was attributed to some mismanage-

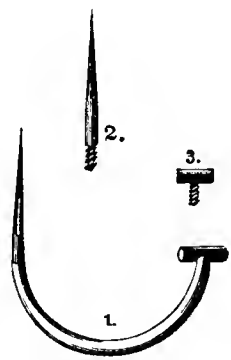
[1] The Physiological Anatomy and Physiology of Man, Am. ed. p. 276.

ment on her part. She came to Charleston in December last, and placed herself under my care for the purpose of being operated on.

Upon examination, I found the laceration to extend from the posterior commissure of the vulva to the anus, implicating, to a considerable extent, the external sphincter; but neither the internal sphincter nor the rectovaginal septum. Nature had so far repaired the injury to the external sphincter, that, in conjunction with the internal, control over the fecal evacuations was preserved. The septum between the lower portion of the rectum and vagina was so thin that, by the advice of a physician whom she consulted, she daily used a cathartic calculated to produce liquid evacuations from the bowels, fearing that the discharge of accumulated hardened feces might complete its rupture. The lower extremity of the posterior columna of the vagina projected very much at the deep-seated margin of the laceration. The wound had healed irregularly on each side, and with considerable puckering and induration. The uterus had a constant tendency to prolapsus; the use of a supporter and pad had the effect of enlarging the external opening and increasing the difficulty. Altogether, the condition of the patient was one of great bodily suffering and extreme mental anguish; and she was anxious to undergo any operative procedure that would afford the possibility of relief. An early day was fixed for the operation.

After a detailed examination of the various modes proposed for the relief of this distressing condition, I determined to adopt that recommended by Bushe, and, without discussing the comparative merits of each method, I shall merely quote the following words from the work of this author.[1]

"To obviate the inconvenience which I have ascribed to the interrupted suture, I have devised a pin, which is represented in Plate VIII., Fig. 4. [See accompanying figures.] This instrument is as thick as that used for harelip, and consists of three parts. The first, which is made of silver, is from one and a half to two inches long, curved as represented in the plate, terminating at one end in a female screw, and at the other in a transverse shoulder, about a quarter of an inch long. The second is a triangular steel pin, exactly resembling that used for harelip, and screws into the extremity of the first portion. The third is made of silver, and resembles the transverse shoulder of the first portion, with this exception, that a small male screw passes vertically from its centre, so that it may be fixed into the first portion when the second is removed. This instrument is to be used in the following manner: the first and second portions being united, provided the tumefaction has nearly subsided, and granulations are formed"—[he is speaking of recent injuries"]—"the patient should be brought to the edge of the bed, her hips elevated, and her knees approximated and carried towards the chin. The parts being now cleansed, the needle ought to be dipped in oil and inserted into the left side of the perineum, a line more than half the breadth of its curve from the edge of the wound, and immediately above the verge of the anus. When it has passed vertically for a distance equal to two-thirds of the depth of its curve, its point should be projected transversely, so as to cross the bottom of the wound, and then carried outward through the other side of the perineum. This stage of the operation will be greatly facilitated, firstly, by pressing out the left labium during the transmission of the needle



[1] A Treatise on the Malformations, Injuries, and Diseases of the Rectum and Anus. Illustrated with plates. By George Bushe, M. D. &c. New York, 1837.

through the left portion of the perineum and the base of the wound; and, secondly, by steadying the right side of the perineum, with the extremity of the thumb placed immediately without the point through which we desire the needle may pass. When the puncture has been completed, the steel pin should be unscrewed and the third portion fixed in its stead. If it is thought advisable to insert a smaller pin higher up, it may be done, and then a thread should be twisted over their extremities, as in harelip. It may be prudent to place a light bolster of lint beneath the twisted ligature. This method of operating was first carried into effect in the almshouse of this city (New York) by my friend, Dr. Stevenson, who, not only on this, but on other occasions, afforded me opportunities of testing chirurgical innovations."—p. 82.

Having ascertained that the pins, as described above, could be constructed by Mr. Steinhardt, an excellent instrument-maker of this city, the 27th of December, 1853, at 12 M., was fixed on for the operation. The patient was directed to be kept upon a low diet for some days; the night previously the bowels to be freely opened by a cathartic, and some hours before the operation the rectum to be cleared by an enema. I regret that I was deprived of the valuable use of chloroform in this case. From the earnest solicitations of the patient and her friends—amounting, I may say, to a positive demand—I was compelled to operate with no other assistants than two ladies; and as my invariable rule, in surgical operations, is never to use chloroform unless its administration be confided to a skilful physician, I was compelled to dispense with its use. To the observance of this precaution, I attribute the fact that no untoward occurrence has ever taken place in my practice from the administration of anæsthetic agents.

The patient was placed across a bed, of such a height as to allow me to sit in a common chair in the proper position, fronting a strong light, with the hips drawn well over the edge of the bed, and the thighs and legs supported by the assistants, as in the operation for lithotomy. I commenced a short distance above the termination of the cicatrix on the left labium, and dissected, with the scalpel and forceps, a thin layer from without inwards a little beyond the mucous membrane, down to the bottom of the fissure, without detaching it. A similar dissection was made on the right side. The two layers were then seized together with the forceps, and removed, by a pair of scissors, from the anus to the projecting lower extremity of the posterior columna of the vagina. This procedure freshened every part of the laceration. Two small patulous processes—remains of the old wound—hanging from each labium on a level with the superior margin of the cicatrices, were also removed. The pins were then introduced as directed by Bushe; one near the anus, the other near the upper termination of dissection. The coaptation of the parts was perfect. No bolster of lint or compress was used. There was no eversion of the edges of the wound, as the crossing of the threads from one pin to the other kept them pressed down, and in perfect apposition. A catheter was introduced into the bladder and confined by tapes, her knees tied together, and, with the thighs flexed upon the pelvis, she was placed on her side, with directions, when she became fatigued, to be turned carefully to the other side, without separating the knees. The bowels were kept in a quiescent state by small doses of tinct. opii, repeated once or twice a day. The parts were daily washed, and a simple pledget of lint, saturated with a solution of the chloride of soda, lightly applied. She was confined to a fluid diet.

On the ninth day the union of the wound was complete, and the pins were removed. There was slight suppuration from one of the orifices of the upper pin, but, under the use of the solution of chloride of soda, this soon ceased.

On the sixteenth day the catheter was dispensed with, and, as the cicatrix appeared firm, an enema was administered. It acted freely without any injury to the newly-formed perinæum. Scarcely any traces of the operation could be observed; the linear cicatrix, from the anus to the new commissure of the vulva, resembled the raphé. The four punctures of the pins appeared like small white dots on each side of the linear cicatrix.

On the 18th January, 1854, the patient walked about the room without the slightest inconvenience, and the next day met me in the parlour.

Charleston, S. C., April, 1854.

Art. IX.—*Cases of Ovariotomy.* By Alexander Dunlap, M. D., of Ripley, Ohio.

Case I.—Mrs. B., of Bracken County, Kentucky, aged 37 years, dark hair and eyes, bilious temperament, and the mother of five children, in September, 1852, came to consult me in reference to an enlargement of her abdomen, which had been supposed to be ascites. A careful examination, and the history of the case, showed it to be ovarian dropsy. I stated to her that medicine could not cure her, that tapping would only afford temporary relief, and that the extirpation of the tumour was her only chance for a cure; at the same time I told her the dangers of the operation, and that her chances of recovery would only be about three out of five, and left her then to decide that question for herself. She returned home. Her attending physician, still adhering to his former opinion—that she had ascites—tapped her. The enlargement of the abdomen was entirely removed by the operation, but in a month it had regained its former size, and she was again tapped. After this operation a tumour was discovered remaining in the abdomen. She was subsequently tapped twice. The amount of fluid drawn off by tapping I could not ascertain. In March, 1853, she sent for me to perform the operation for the removal of the tumour. I found her very much reduced in flesh; the abdomen enormously distended; fluctuation distinct in every part, with the exception of the right iliac region. She was most of the time confined to her bed, yet free, as I judged, from any organic disease, except that of the ovary. I determined to operate, which I did, after preparing her system, on the 24th of March, 1853, assisted by Dr. J. S. Bradford, of Augusta, Ky., in the presence of a number of medical gentlemen and students. The patient having been placed upon a suitable table, with her shoulders elevated, and her feet resting upon a chair at the end of the table, and brought under the influence of chloroform by Dr. Woodward, of Ripley, O., I commenced by an incision in the median line, through the integument and cellular tissue, from the umbilicus to a point near the symphysis pubis, by one stroke of the knife; then, by a careful dissection at one point of the incision, I opened the peritoneal sac, which I found free from adhesions at that point. By the use of my finger as a director, an opening was readily made into the peritonæum, corresponding with the one in the integument. The opening thus made was nearly twelve inches long. The adhesions, which were but slight, were then broken up by the hand (in which Dr. Bradford assisted me), excepting at the points where paracentesis had been performed, which I separated by the knife. The